Starflam® AFR450B1

Ascend Performance Materials Operations LLC - *Polyamide 66*

General Information

Product Description			
Starflam AFR450B1 is a flame retardant, 25% glass fiber reinforced PA66 for injection molded applications.			
General			
Material Status	• Commercial: Active		
Availability	• Europe	• North America	
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight		
Additive	• Flame Retardant	• Heat Stabilizer	• Mold Release
Features	• Flame Retardant	• Halogenated	• Heat Stabilized
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA66-GF25 FR		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.56	g/cm³	ISO 1183
Water Absorption (Saturation, 73°F)	4.5	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (73°F)	1.32E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	21800	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.0	%	ISO 527-2
Flexural Modulus (73°F)	1.29E+6	psi	ISO 178
Flexural Stress (73°F)	31200	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact Strength			ISO 180/1A
-22°F	2.9	ft·lb/in²	
73°F	3.3	ft·lb/in²	
Unnotched Izod Impact Strength (73°F)	29	ft·lb/in²	ISO 180/1U
Thermal	**Nominal Value**	**Unit**	**Test Method**
CLTE - Flow (73 to 131°F, 0.0787 in)	1.7E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	5.0E-5	in/in/°F	ISO 11359-2
Electrical	**Nominal Value**	**Unit**	**Test Method**
Comparative Tracking Index (0.118 in)	375	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Glow Wire Flammability Index (0.08 in)	1760	°F	IEC 60695-2-12

Processing Information

Injection	**Nominal Value**	**Unit**
Drying Temperature	167 to 185	°F
Drying Time	4.0 to 6.0	hr
Suggested Max Moisture	0.20	%
Rear Temperature	500 to 518	°F
Middle Temperature	518 to 536	°F
Front Temperature	518 to 545	°F
Processing (Melt) Temp	518 to 545	°F
Mold Temperature	140 to 194	°F